Work Order ID 100648

Thursday, April 25, 2013 12:48:59 PM

Page 1

Item ID:

D4130-3

4/25/2013

Accept

N900040100

Revision ID: Item Name:

Aft Cabin Floor Protector

Start Qty: 2.00

Req'd Qty: 2.00

Cust Item ID:

Customer:

Required Date: 4/26/2013 Reference:

Start Date:

Approvals:

Process Plan:

Date:

Run

QC:

Date:

SPC (V/N).

Data.

Stop

		Date.	SIC (1/N):		ate:				×N	R2*
Sequence ID/ Work Center ID	Operation	~	Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Oty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr		reason and the second s							
D4130	В									
100			0.00			and the second of the			·	
100	FLOW WATER JET						\sim			DAS
Waterjet	Memo		0.00				d			13 24 25
FLOW CNC Waterjet	1-Cut as pe Dwg Rev:_ Prog Rev:_ 2-Deburr if	B								,

110

QC2- Inspect parts off machine FAI/FAIB

0.00

Quality Control

Memo

Memo

0.00

120

QC8- Inspect parts - second check

120 QC.

Quality Control

									DQA:	Date:	
NCR: Y	es / No				WORK ORDER NON-O	CONFOR	MANCE / UP	DATE	QA Closed:	Date:	
Work Orde	r·				DISPOSITION		w	AGAINST DE	PARTMENT	/PROCESS	
Part N					Rework Scrap		Skid-tube Machining	Crosstube Small Fab	Pro	Water Jet d. Eng. Coor.	Engineering Quality
NCR N					Use-as-is Work Order Update	Ther	noforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
Root	Date	Step	Qty		ption of work order update or Non-conformance	Initial Chief Eng	1	tion cription	Sign & Date	Verification	QC Inspector
Cause	Date	Step	Qty		or Non-comormance	Cilici Eng	Desc	ription	Date	· · · · · · · · · · · · · · · · · · ·	
Doc/Data			i							()	
quip/Tooling	_									· `	
Operator	_										
Material	_										
Setup		ŀ					•				
Other									İ	i i	೧೦
Process	_					1				1	-
Supplier											
Training										1	
Jnapproved	<u> </u>					<u> </u>			<u> </u>	<u> </u>	<u> </u>
						AULT CATE	GORY			<u> </u>	
Landin	ig Gear			,	General				1		1 _ /
1	Bending				Bend	Grain		-	Ovalized	, i -	Pressure/Forced
	Centre No	ot Concer	ntric to (D/S	BOM/Route	Hardw		<u> </u>	Over/Under	· -	Temperature/Cure
1	Cracks				Broken/Damaged	—	tion Incomplete	<u> </u>	Part Incorre	, –	Weld
	Crushed/	Crimped.			Burrs	├ ──	tions Incomplete/	/Unclear	Part Lost/M	-, -	Wrong Stock Pulled
Ĺ	Cuffs				Contamination	Maint	enance		Part Moved	1	
[Heat Trea	at			Countersink	Mislab	eled		Positioned '		7
Ī	Inspection	n Strin in	Tuhe		Cut Too Short	Misrea	hd	1	Power Loss	/Surgé l	Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drill Holes

Drawing

Thursday, April 25, 2013 12:48:59 PM

Page 2

D4130-3 Item ID: Accept *N900040100* Setup Start **Revision ID:** Item Name: Aft Cabin Floor Protector **Start Date:** 4/25/2013 Start Qty: 2.00 Cust Item ID: **Required Date: 4/26/2013** Req'd Qty: 2.00 **Customer:** Reference: Run Approvals: Process Plan: Date: **Tooling:** Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Reject Set Up/ Tool ID Tool # Plan Reject Accept Insp. Work Center ID Description **Run Hours** Code Qty Qty Number Stamp 130 Identify as per dwg & Stock Location:____ 0.00 *130* 100046. Packaging Memo Packaging 140 QC21- Final Inspection - Work Order Release 0.00 *140* QC 0.00 Memo Quality Control

> MF 13426

										DQA:	Date:	
NCR: Y	'es / No				WORK ORDER NON-O	CON	FORN	MANCE / UP		QA Closed:	 Date:	
Work Orde					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part N	lo				Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update		itial	Ac	tion	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chie	ef Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling											,	
Operator												
Material												
Setup						1						
Other			1 1									
Process												
Supplier												
Training												
Unapproved									<u> </u>			
					F.	AULT	CATE	GORY				
Landir	ng Gear				General				_	•	_	1
	Bending				Bend		Grain			Ovalized		Pressure/Forced
	Centre N	ot Conce	ntric to O)/S	BOM/Route	<u> </u>	lardwa	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged		nspecti	on Incomplete		Part Incorre	ct	Weld
Ī	Crushed	/Crimped			Burrs		nstruct	ions Incomplete/	/Unclear	Part Lost/M	issing	Wrong Stock Pulled

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Part Moved

Positioned Wrong

Power Loss/Surge

Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Cuffs

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Picklist Print

Thursday, April 25, 2013 12:48:58 PM

Work Order ID:

100648

Parent Item:

D4130-3

Parent Item Name:

Aft Cabin Floor Protector

Start Date: 4/25/2013

Required Date: 4/26/2013

Page 1

Start Qty: 2.00

Required Qty: 2.00

Comments:

IPP Rev:A 10.06.08 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.125-F60029-04 GE PLASTICS LEXAN SE	HEET	Purchased	No	TO MARKET . THE PARTIES		100	sf	1,457.3300	9.96	20.968421	- 1	13.0	4.25
				Location		Loc Oty	Lo	c Code					
				MAT018		1457.33							

124866

1457.33 1457.33

											DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-C	COI	VFORM	MANCE / UP	DATE		,	
											QA Closed:	Date:	
Work Ord	or.					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS	
Work Ord	C1.	<u> </u>	····			Rework	1		Skid-tube	Crosstube	7	Water Jet	Engineering
Part I	No.				:	Scrap]		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
	-					Use-as-is]	Thern	noforming	Finishing	Rec/Sto	re/Packaging	Other
NCR	No.	_	·			Work Order Update			Large Fab	Composite		Supplier	
Post			<u> </u>		Doscri	ption of work order update		Initial	Λ.σ.	tion	Sign &		
Root		Date	Step	Qty		or Non-conformance	1	nief Eng		ription	Date	Verification	QC Inspector
Cause Doc/Data	Н	Date	steh	Qty		n Non-comormance	1	ner Ling	Desci	приоп	Date	Vermedion	QC IIISPECTOI
Equip/Tooling	H			:									
Operator	П												
Material	П											i .	
Setup													
Other	П										`		
Process				.									
Supplier													
Training													
Unapproved							<u> </u>						
						F.	AUL	T CATE	GORY				
Landi	ng G	iear				General	_	7		_	_		.
		Bending			_	Bend	<u>_</u>	Grain		-	Ovalized	-	Pressure/Forced
	${f -}$	Centre No	ot Concer	ntric to (o/s	BOM/Route	<u> </u>	Hardwa		·	Over/Unde	-	Temperature/Cure
	-	Cracks				Broken/Damaged	_	⊣ '	ion Incomplete		Part Incorre		Weld
	-	Crushed/	Crimped.		<u> </u>	Burrs	-	4	ions Incomplete/	Unclear	Part Lost/M		Wrong Stock Pulled
	-	Cuffs				Contamination	-	Mainte		-	Part Moved		
	Н	Heat Trea			<u> </u>	Countersink	_	Mislabe		-	Positioned		7045
	\vdash	Inspectio		Tube		Cut Too Short	-	Misread	d	L	Power Loss	/Surge	Other
	-	Ripples in				Drill Holes	-	Offset	• 14 · ·				
		Torque W	/aves in E	extrusion	n	Drawing		JOut of (Calibration				

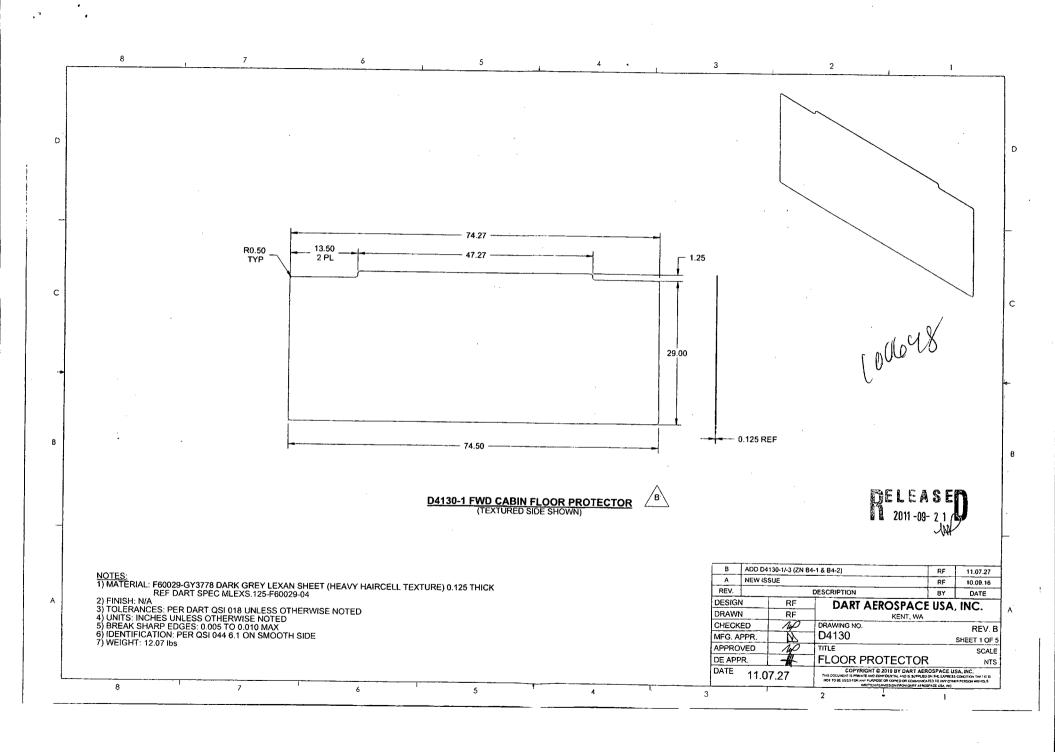
Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G



										DQA:	Date	:
NCR:	Yes / No				WORK ORDER NON-	COI	NFORN	ANCE / UPI	DATE			
										QA Closed:	Date	•
Work Orde	or:				DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	,
WOIK OIG	=1 ·				Rework	7		Skid-tube	Crosstube		Water Jet	Engineering
Part N	No.				Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
		····			Use-as-is		ı	oforming	Finishing	Rec/Sto	re/Packaging	Other
NCR I	No		· · · ·		Work Order Update]		Large Fab	Composite		Supplier	
Root				Descri	ption of work order update		Initial	Act	tion	Sign &		
Cause	Date	Step	Qty	•	or Non-conformance	Ch	nief Eng	Desci	ription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling					·	·		•			,	
Operator												
Material												
Setup					•							
Other												
Process												
Supplier				·			İ			ļ	-	
Training												
Unapproved										<u> </u>		<u></u>
					F	AUI	LT CATE	GORY				
Landi	ng Gear				General	_	,			,	_	¬
	Bendin	3			Bend	_	Grain			Ovalized	<u> </u>	Pressure/Forced
	Centre	Not Conce	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	L	Inspecti	on Incomplete		Part Incorre	ct	Weld
	Crushed	d/Crimped			Burrs		Instruct	ons Incomplete/	Unclear	Part Lost/M		Wrong Stock Pulled
	Cuffs				Contamination	L	Mainte	nance		Part Moved		
	Heat Tr	eat			Countersink	L	Mislabe	led	<u></u>	Positioned \	N rong	
	Inspect	ion Strip in	Tube		Cut Too Short		Misread	1		Power Loss,	/Surge	Other
,	Ripples	in Bend			Drill Holes		Offset					

Out of Calibration

Out of Sequence

Outside Dimensions

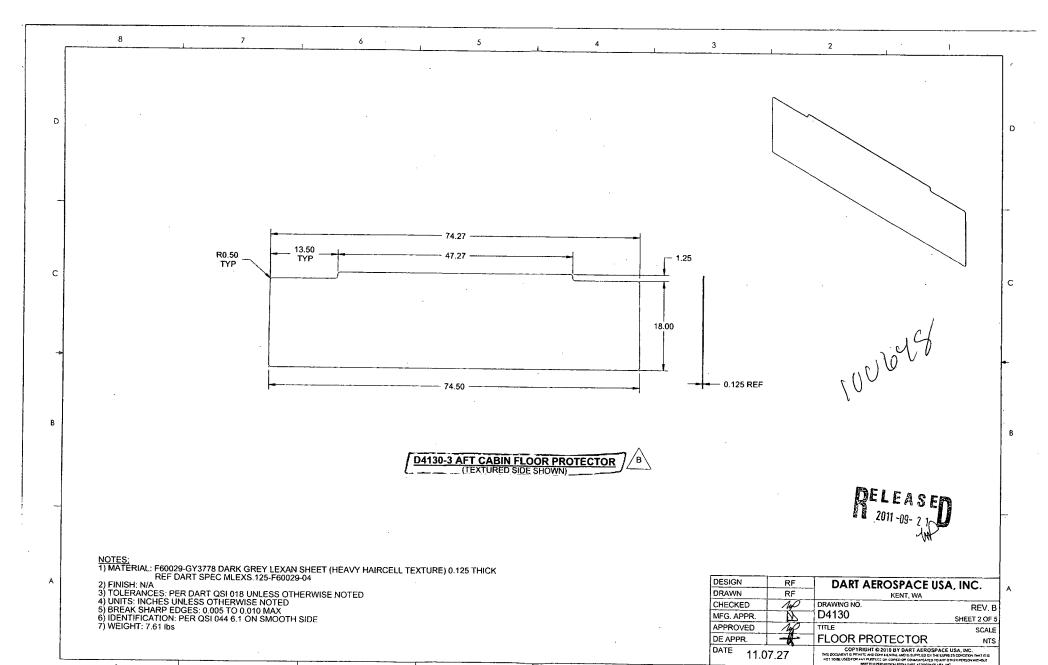
Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G



NCR: Y	es / No				WORK ORDER NON-C	CON	FOR	MANCE / UP	DATE		-	
										QA Closed:	Date	:
Work Orde	r:				DISPOSITION				AGAINST DE	PARTMENT	_	
Part N					Rework Scrap · Use-as-is			Skid-tube Machining noforming	Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	0			·· ··	Work Order Update			Large Fab	Composite]	Supplier	
Root				Descri	ption of work order update	lr	nitial	Act	tion	Sign &		
Cause	Date	Step	Qty	•	or Non-conformance	Chi	ef Eng	Desci	ription	Date	Verification	QC Inspector
Doc/Data							•					
Equip/Tooling											`	
Operator												
Material												
Setup				•					y			
Other	_											
Process									•	İ		·
Supplier	_											
Training	_									i i		
Unapproved		<u>l</u>	1			4	CATE	CORY		1	1	
						AULI	CATE	GURY				
Langin	ng Gear			<u></u>	General Bend		Grain			Ovalized	Г	Pressure/Forced
H	Bending Centre N	at Cansai	ntric to 1		BOM/Route		Grain Hardwa	ore	<u> </u> -	Over/Under	tolerance	Temperature/Cure
-	Cracks	ot concei	nunc to	^{5/3} -	Broken/Damaged	\vdash		ion Incomplete	-	Part Incorre	<u> </u>	Weld
-	Crushed/	Crimpod		-	Burrs	-	-	tions Incomplete/	Unclear	Part Lost/M	<u> </u>	Wrong Stock Pulled
F	Cuffs	Crimpea.	-	<u> </u>	Contamination	_		enance		Part Moved	_	
+	Heat Trea	at			Countersink		Mislabe			Positioned \		
}	Inspectio		Tube	<u> </u>	Cut Too Short	\vdash	Misrea			Power Loss,		Other
}	Ripples in			<u> </u>	Drill Holes		Offset		L			
-	Torque W		Extrusio	n	Drawing	\vdash		Calibration				
·	Turning S				Finish		Out of !	Sequence				

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

D 17.50 R0.50 - 0.125 REF D4130-5 FWD CARGO FLOOR PROTECTOR (TEXTURED SIDE SHOWN) NOTES: 1) MATERIAL: F60029-GY3778 DARK GREY LEXAN SHEET (HEAVY HAIRCELL TEXTURE) 0.125 THICK REF DART SPEC MLEXS.125-F60029-04 REF DART SPEC MLEXS.125-F60029-04
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: PER QSI 044 6.1 ON SMOOTH SIDE
7) WEIGHT: 4.41 lbs DESIGN DART AEROSPACE USA, INC. HS DRAWN RF KENT, WA

CHECKED DRAWING NO. REV. B D4130 MFG. APPR. SHEET 3 OF 5 APPROVED TITLE SCALE FLOOR PROTECTOR

COPYRIGHT & 2818 BY DART AEROSPACE USA, INC.

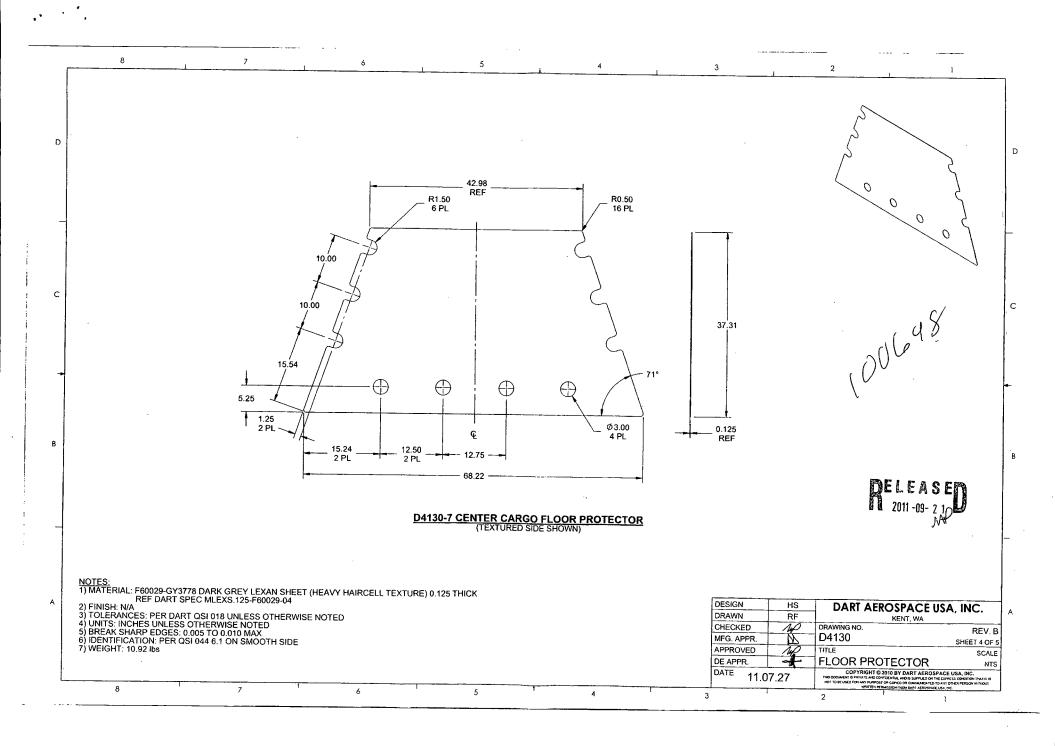
MISCOMMOTION OF MODIFICATION OF SUPERIOR OF HE COME PROTECTION OF THE PROTECTION OF THE COME PROT DE APPR. NTS DATE 11.07.27

3

		DQA:	Date:	
NCR: Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE			

										QA Closed:	Date	
Work Orde	er:					DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part N	No					Rework Scrap Use-as-is Work Order Update	The	Skid-tube Machining ermoforming Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update	Initia	A	ction	Sign &		
Cause	D	ate	Step	Qty	(or Non-conformance	Chief E	ng Des	cription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training												
Unapproved		l.		<u> </u>			AULT CA	L TEGORY		1	1	
Landi	ng Gear					General						
	Ber Cer Cra Cru Cuf Hea Insp Rip Tor	nding atre Not cks shed/C fs at Treat oection ples in I que Wa ning Se	Strip in Bend aves in E quence	Tube xtrusio		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish	Inspections of the control of the co	ware ection Incomplete uctions Incomplete ntenance abeled ead et of Calibration of Sequence	e/Unclear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned Power Loss	ect lissing Wrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	l lwa	ve/Twis	st in Tub	e	1	Folio	Outs	ide Dimensions			0	

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G



										DQA:	Date:	· · · · · · · · · · · · · · · · · · ·
NCR:	Yes / No				WORK ORDER NON-	100	NFOR	MANCE / UPD	ATE .	•	- 1	
										QA Closed:	Date:	-
					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Work Orde	er:				Rework	1 l		Skid-tube	Crosstube		Water Jet	Engineering
Part N	No.				Scrap	1 1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
raiti	···				Use-as-is	1		noforming	Finishing		re/Packaging	Other
NCR I	No.				Work Order Update	1	l	Large Fab	Composite		Supplier	1
					· -					·		
Root				Descri	ption of work order update		Initial	Acti	on	Sign &	· · · ·	
Cause	Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Descri	ption	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling						İ						
Operator												
Material												
Setup											ı	1
Other										ļ		
Process												
Supplier												
Training												
Unapproved		<u> </u>	<u> </u>	<u> </u>		<u> </u>	T CATE	CORY				
1					r General	AUL	LICATE	GURT		<u></u>		
Langi	ng Gear Bending				Bend	Г	Grain			Ovalized	· F	Pressure/Forced
	Centre N	ot Conco	ntric to	0/5	BOM/Route	\vdash	Hardwa	re	<u> </u>	Over/Under	tolerance	Temperature/Cure
	Cracks	or conce	itiic to	°′3 ⊢	Broken/Damaged	-	4	ion Incomplete	<u> </u>	Part Incorre	. —	Weld
	Crushed/	Crimped		-	Burrs	-	4 '	ions Incomplete/U	nclear	Part Lost/M	_	Wrong Stock Pulled
	Cuffs	Cinnpeu.	•	<u> </u>	Contamination		Mainte		<u> </u>	Part Moved		. .
	Heat Trea	at			Countersink		Mislabe			Positioned \	V rong	•

Misread

Out of Calibration
Out of Sequence

Outside Dimensions

Offset

Other

Power Loss/Surge

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

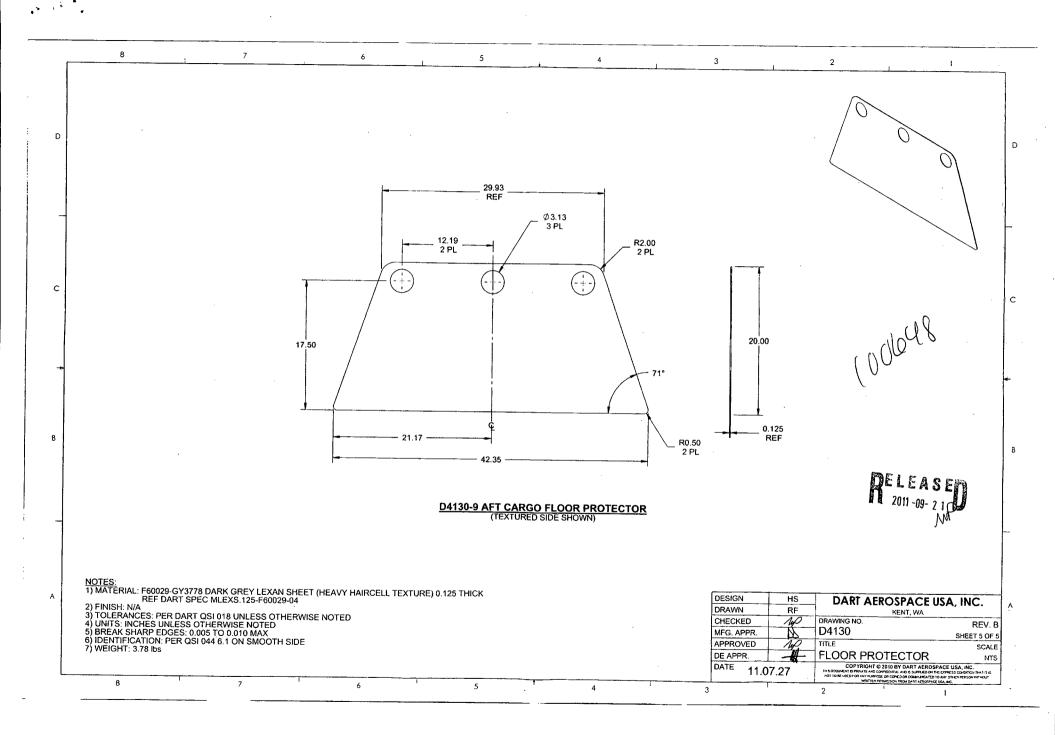
Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing



												DQA:	Date	::	
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFOR	MANCE / UP	DATE		0.4.61	Data		
						T				·		QA Closed:	Date	?:	
Work Ord	or.					DISPOSITION				AGAINST	DE	PARTMENT/	PROCESS		
Work Ord	٠٠٠ -					Rework			Skid-tube	Crosstube	-		Water Jet		Engineering
Part I	۷o.				· .	Scrap			Machining	Small Fab		ł	d. Eng. Coor.	4	Quality
						Use-as-is		Thern	noforming	Finishing		Rec/Stor	e/Packaging	4	Other
NCR I	۷o.					Work Order Update]		Large Fab	Composite	:		Supplier		
Root					Descri	ption of work order update		nitial	Ac	tion		Sign &			
Cause		Date	Step	Qty		or Non-conformance	Cr	ief Eng	Desc	ription		Date	Verification		QC Inspector
Doc/Data															
Equip/Tooling													•	١	
Operator					*		1			•					
Material			!												
Setup	Ш						ļ						:		
Other	Ш					•							100		
Process	Ш														
Supplier			Ì												
Training				Ì	1									Ì	
Unapproved		<u> </u>	<u> </u>				<u> </u>					<u> </u>		_	
							AUI	T CATE	GORY				1		
Landi		1			_	General	_	1 .			Γ-	1'	·		
	Н	Bending			_	Bend	<u> </u>	Grain			-	Ovalized	.·.		ressure/Forced
		Centre N	ot Conce	ntric to	O/S	BOM/Route	_	Hardwa			-	Over/Under	⊢		emperature/Cure
l	ıi	Cracks			i i	Broken/Damaged	1	Hinspect	ion Incomplete		į	Part Incorred	ct l	VA	Veld .

Instructions Incomplete/Unclear

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Wrong Stock Pulled

Other

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Part Moved

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Crushed/Crimped.

Inspection Strip in Tube

Torque Waves in Extrusion

Cuffs

Heat Treat

Burrs

Contamination

Countersink

Cut Too Short Drill Holes

Drawing Finish

Folio

DART AEROSPACE LTD	Work Order:	100648
Description: AFT Cabin Floor Protector	Part Number:	D4130-3
Inspection Dwg: 04130 Rev: 3		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

THO ACTOLL MOTEOTION OF LONGO									
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments			
74.50	+1-0.030	74.50	√.		V	JKM-06			
74.27	+1-0-030	74.27	\downarrow		T				
13.50	+1-0.030	13.50	✓		· T				
47.27	+1-0.030	47.27	V		T				
18.00	+1-0030	18.00	$\sqrt{}$						
1.25	+1-0.030	1.25			T	·			
:									
•									
		,							
						·			
					,				
	· · · · · · · · · · · · · · · · · · ·		- <u></u>						

Measured by:	Inda	Audited by:	2.40	Preliminary Approval:	
Date:	13-04-25	Date:	13-425	Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

\$ 10.04.15